

Findings Pursuant to the California Environmental Quality Act,  
Statement of Overriding Considerations and Mitigation Monitoring and  
Reporting Plan

*WCCSL Bulk Materials Processing Center and Related Actions*

Board of Supervisors  
December 14, 2004

**I. Project Overview**

The WCCSL Bulk Materials Processing Center and Related Actions Project consists of approval of LUP 022026, thereby amending the existing Land Use Permit (LUP) 2054-92 for WCCSL's Bulk Materials Processing Center by the Board, and rescinding by the Board of existing Land Use Permit 2043-94 related to the termination of operations at the Soil Remediation Facility. The project is summarized as follows:

- Increase the amount and types of compostables and wood waste processed.
- Increase the amount of asphalt and concrete waste processed.
- Start-up of a new spreading/drying operation for wastewater sludge and dredged materials.
- Start-up of a new soil reclamation/processing operation to reclaim non-contaminated soils, and to combine high moisture content mud and sludges and with powdery materials to create a product suitable for Alternative Daily Cover (ADC), final cover, final cap, or off-site use.
- Construction and operation of a solid waste transfer and resource recovery station (the Waste Recycling Center, or WRC) at the WCCSL to recycle, sort, and transfer for disposal waste from self-haulers, industrial debris boxes, the west Contra Costa communities and commercial customers that would not be processed at the existing transfer station operated by West County Resource Recovery, Inc. at 101 Pittsburg Avenue in North Richmond.
- Construction of a Public Access Trail

The Board finds that the Preferred Environmental Alternative (PEA), more fully described and discussed in Chapter 13 of the EIR, is the best alternative to meet the needs of the Applicant's objectives and goals, while protecting the environment. The Board finds that the PEA, with respect to the selection of Area A for the location of the WRC transfer station, has been studied at a project level of detail, affording the Board with the ability to determine that the WRC in this location represents the optimal land use decision for the WRC at the WCCSL site. The Board finds that this PEA, which includes the Project proposed by the Applicant, elimination of Phase 4 of the Trail, the selection of Area A and the associated development plan for the proposed WRC transfer station, and the use of aerated static pile as the primary composting

process, provides the best balance between satisfaction of the Applicant's project objective and mitigation of potential significant impacts, to the extent feasible. Significant impacts associated with the proposed Project would be reduced to less-than-significant levels with the PEA, with the exception of PM<sub>10</sub> emissions. Although the PEA would have lower PM<sub>10</sub> emissions than the proposed Project (because of the reliance on the aerated static pile composting process in lieu of windrow composting), a significant unavoidable PM<sub>10</sub> impact would remain. All other potentially significant impacts identified in the Draft EIR would be mitigated to a level of insignificance.

As noted above, a component of the PEA is the construction and operation of the WRC in Area A on the WCCSL site located wholly within the Richmond city limits. The Draft EIR, in Chapter 13 "Alternatives", Section C, pages 13-7 through 13-29, provides an evaluation of potential impacts and prescribes control measures or mitigation measures specific to the Area A location. The components of the PEA are described in Section E. Preferred Environmental Alternative, pages 13-34 through 13-47.

## **II. CEQA Process Overview**

Contra Costa County served as the Lead Agency for preparation of the WCCSL Bulk Materials Processing Center and Related Actions EIR pursuant to the California Environmental Quality Act (CEQA). The County prepared the EIR in accordance with CEQA (Public Resources Code § 21000 et seq.), the CEQA Guidelines (14 Cal. Code Regs. § 15000 et seq.), and the County's CEQA guidelines. The EIR consists of the Draft EIR published on November 5, 2003 ("Draft EIR"), the Responses to Comments published on June 25, 2004 ("RTC"). The Final EIR comprises the Draft EIR and Responses to Comments, as well as all appendices thereto. The EIR has State Clearinghouse No. 2002102057. Below is an overview of the significant milestones of the CEQA process that have been completed related to this Project:

- October 10, 2002: Environmental Impact Report (EIR) Notice of Preparation issued;
- November 1, 2002: CEQA Scoping Session held in North Richmond;
- November 6, 2003: Draft EIR circulated for review, beginning the 45-day public comment period;
- November 25, 2003: Zoning Administrator held a public hearing in North Richmond to provide further opportunity for public comments on the Draft EIR;
- December 22, 2003: End of 45-day public comment period on the Draft EIR;
- June 25, 2004: Final EIR/Response to Comments document released was distributed as required by CEQA;
- July 6, 2004: County Zoning Administrator conducted a closed public hearing regarding the adequacy of the Final EIR, and recommended to the Board that the EIR be certified as being in compliance with CEQA;

- July 13, 2004: County Board of Supervisors certified the EIR as being in compliance with CEQA. No action was taken on adoption of findings or approval of land use permit conditions.

### **III. The Final EIR**

The Final Environmental Impact Report (Final EIR) Responses to Comments Document has been prepared to respond to comments received by the lead agency on the Draft Environmental Impact Report (Draft EIR) for the WCCSL Bulk Materials Processing Center and Related Actions.

The Final EIR includes a revised summary of impacts, control measures, and mitigation measures (Table 2-1 from the Draft EIR); the comments received on the Draft EIR; responses to individual comments; and a chapter that contains revisions to the Draft EIR text and graphics as appropriate.

The Responses to Comments Document, together with the November 2003 Draft EIR and technical appendices, constitutes the Final EIR. This Final EIR contains the following elements:

- The Draft EIR dated November 2003 (bound separately);
- Letters from public agencies, organizations, and persons commenting on the Draft EIR, including a transcript of public testimony received at the public hearing held on November 25, 2003;
- A chapter containing a revised summary of impacts, control measures, and mitigation measures (Table 2-1 from the Draft EIR);
- Responses to comments;
- A chapter containing revised text and graphics prepared to clarify or correct the text of the Draft EIR.

The Final EIR evaluates the potential environmental impacts associated with the project known as the Bulk Materials Processing Center (BMPC) and Related Actions at the West Contra Costa Sanitary Landfill (WCCSL) proposed by West Contra Costa Sanitary Landfill, Inc. ("Applicant") and West County Landfill, Inc. ("Owner").

### **IV. Findings Pursuant to the California Environmental Quality Act**

The California Environmental Quality Act (CEQA), Public Resources Code, §21000 et seq., requires written findings of Project impacts, pursuant to §21081. Regarding these findings,

CEQA Guidelines, Title 14, California Code of Regulations (Guidelines), §15091, states the following:

- a) No public agency shall approve or carry out a project for which an EIR has been completed which identified one of more significant environmental effects of the project unless the public agency makes one or more written findings for each of those Significant Effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
  - 1) Changes or alternative have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
  - 2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such agency or can and should be adopted by such agency.
  - 3) Specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the Final EIR.
- b) The findings required by subsection (a) above shall be supported by substantial evidence in the record.

The changes or alterations referred to in State law, as quoted above, may be mitigation measures, alternatives to the Project, or changes to the Project incorporated by the Project proponent. The Final EIR identifies mitigation measures that would minimize significant effects of the Project or to mitigate other potential effects which may not be, strictly speaking, environmental effects under CEQA. These mitigation measures will be incorporated into the design of the Project. The Mitigation Monitoring and Reporting Program is designed to ensure that all mitigation measures identified in the Final EIR and these Findings will be implemented and monitored by the appropriate regulatory agency.

The Board hereby ratifies, adopts and incorporates the analysis, explanation, findings, responses to comments and conclusions of the EIR, as clarified or supplemented by documents and testimony received after preparation of the Final EIR from the County Zoning Administrator, County staff, and the County's environmental consultant and subconsultants, from the Applicant, and from the Applicant's consultants. The Board recognizes that there may be controversy among experts and laypersons over the EIR's methodology, use of data, conclusions regarding the severity of impacts, and conclusions that many impacts would feasibly be mitigated. The Board has carefully evaluated these conflicting expert and lay opinions and evidentiary basis for these opinions and conclusions, and specifically adopts the EIR's conclusions regarding the level of significance of each impact prior to and following implementation of the mitigation measures as reflected in these findings. The Board adopts the reasoning of the EIR, of staff reports, and of staff and Applicant presentations.

Exhibit E (including Table 1) is the proposed Mitigation Monitoring and Reporting Program for the Project.

## **V. Findings Regarding Independent Review and Judgment**

The EIR for the Project was made available to each member of the Board. The Board hereby finds that the FEIR reflects the independent judgment of the Board. The Board also finds that it has independently reviewed and analyzed the FEIR prior to taking any final action with respect to the Project.

## **VI. Findings Regarding Potentially Significant Impacts of the Project**

### **Land Use, Plans and Policies**

**Impact 4-4** Proposed Project components are not consistent with the County or Regional NDFE

Mitigation: The West Contra Costa Integrated Waste Management Authority would revise its NDFE to include the proposed WRC at the BMPC as a transfer facility (non-disposal facility) pursuant to Article 7, Chapter 9, Division 7 of Title 14 of the California Code of Regulations.

Supporting Explanation: The existing BMPC at the WCCSL is included in the County NDFE as a material recovery facility, but not as a transfer station. The existing BMPC is included in the Regional Plan and Program as additional Non-Disposal Facilities which may or may not be selected for receipt of potentially divertible materials received at the Central IRRF. The County and West Contra Costa Integrated Waste Management Authority (WCCIWMA) would revise their NDFEs to include the proposed WRC at the BMPC as a transfer facility (non-disposal facility) pursuant to Article 7, Chapter 9, Division 7 of Title 14 of the California Code of Regulations.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Impact 4-5** Implementation of the expanded operations at the BMPC and Central IRRF, and continued landfill operations at the WCCSL through January 2006 present the potential for continued or increased illegal dumping activity in the North Richmond area.

Mitigation: The agency(ies) with applicable permit authority (County, City, or LEA) and mitigation monitoring responsibility would require

that applicable permits contain conditions of approval specifying the following:

- Mitigation Fee. The facility operator shall pay a mitigation fee of an amount to be determined by the applicable permitting authority(ies) to defray annual costs associated with collection and disposal of illegally dumped waste and associated impacts in North Richmond and adjacent areas. The mitigation fee should be subject to the joint control of the City and County and should be collected on all solid waste and processible materials received at the facility consistent with the existing mitigation fee collected at the Central IRRF.
- Agency Coordination. Facility operator shall participate in County or City task forces and pilot programs established to address illegal dumping in North Richmond and adjacent city areas.
- Off-Site Debris and Litter Policing. The facility operator shall provide weekly debris and litter clean up of Parr Boulevard from the Richmond Parkway to the facility entrance and roads within the “Hotspot Zones 1-6” identified in Table 4-3 and Figure 4-5 of this EIR and on other access roads as directed by the permitting authority(ies). As needed, the permitting authority(ies) may require more frequent policing to control debris or litter.
- Littering Signs. The facility operator shall install and maintain signs noting littering and illegal dumping laws and penalties along Parr Boulevard (the main access road to the facility) and the following other access roads:
  - Richmond Parkway, from Parr Blvd. To Gertrude Ave.
  - Pittsburg Ave., from Richmond Parkway to 3<sup>rd</sup> Street
  - Garden Track Blvd., south of Pittsburg Ave.
  - Market Ave., from 1<sup>st</sup> Street to the SPRR tracks.
  - 3rd Street, from Market Ave. to Grove Ave.
  - 5th Street, from Verde Ave. to Chesley Ave.
  - Battery Street, from Alamo Ave. to Vernon Ave.
  - Kelsey Street at the SPRR tracks
- The permitting authority(ies) may designate other roads for signage as needed. The text on the signage should be subject to the review and approval of the permitting authority(ies).

- Hotline. The facility operator shall establish an Illegal Dumping Hotline phone number for use by residents and businesses to report incidences of illegal dumping in the North Richmond area. The hotline phone number shall be prominently listed on all “littering signs” described above.
- Reports or complaints shall be investigated within 24 hours. Verified incidents of illegal dumping or litter or debris shall be collected within 24 to 48 hours of verification, unless additional time is allowed by the applicable permitting authority.
- Reporting Requirements. The facility operator shall maintain records regarding all complaints/reports and actions taken to respond including locations, dates, and times. Records shall be made available to the City upon request.

Supporting Explanation: At the WCCSL, expansion of BMPC operations is proposed along with continued landfilling operations until approximately January 2006. With the continued operation of the permitted Central IRRF, the potential exists for continued or increased illegal dumping activity in North Richmond (in both City and County areas) on private lots and in the public rights-of-way (e.g. roadways). Starting with WCCSL in the early 1950s and later operation of the Central IRRF in the early 1990s, North Richmond is host to two solid waste facilities within one mile of each other. Illegal dumping of debris and litter is a persistent problem in North Richmond. Illegal dumping is unsightly and potentially unsanitary. Illegal dumping creates a negative image for the community of North Richmond and is a source of concern among its residents. Factors that contribute to illegal dumping in the North Richmond area include, but are not limited to:

- Less convenient facility operating hours
- Disposal rates
- Willful dumping by unscrupulous individual haulers
- Lack of customer awareness of the acceptable waste that can be disposed at local facilities.
- When a load is rejected, it may be illegally dumped in the community.

### *Costs of Illegal Dumping*

The collection of debris represents a substantial cost to the County for clean-up. Contra Costa County Public Works Department (PWD) tracking of debris collection costs specifically to the North Richmond area was initiated in fiscal year 2000-2001. County PWD maintains approximately 640 centerline miles of roadway in the county, of which 180 centerline roadway miles are in West County (10.1 miles are in North Richmond). Maintenance responsibilities include collection of debris and litter illegally dumped on County roads. For fiscal year 2002-2003, the North Richmond debris cost of \$209,895 represented about 45 percent of the total West County area debris cost of \$463,039, and about 20 percent of the total debris cost countywide of \$1,045,203. Compared to centerline miles of roadway and population, the North Richmond area contains about 1.6 percent of county centerline roadway miles, and the West

County area contains about 28 percent of county centerline roadway miles, respectively. Of the \$209,895 expended in fiscal year 2002-2003, approximately 81 percent was spent on labor and equipment, and 19 percent was spent on disposal fees. Costs for North Richmond litter/debris pickup increased from \$83,252 in fiscal year 2000-2001 to \$209,895 in fiscal year 2002-2003, which is an increase of \$127,643 or 153 percent during this three-year period.

### *Illegal Dumping Hotspots*

County Public Works and General Services staff identified locations where illegal dumping occurs most frequently in the North Richmond area. These locations were identified by staff with many years of experience in collection of litter/debris in North Richmond. Some additional sites were identified based on information from the North Richmond community. For purposes of the EIR, locations were grouped into six zones. Each zone contains multiple sites where illegal dumping has occurred.

### *Mitigation Fee*

At the time the Central IRRF was permitted in 1993, the facility was expected to process all solid waste in West County after the landfill closed. The Central IRRF is required to pay a Host Community Mitigation Fee as a condition of County Land Use Permit 2054-92. This fee is to be paid on solid waste/processible materials received at the facility to mitigate the general impacts of the IRRF on the adjoining community of North Richmond. Currently, the amount of the fee is \$2.76 per ton. The fee was initially \$2.00 per ton and has since been adjusted annually to reflect the change in the Consumer Price Index.

### *Mitigation Fee MOU with the City of Richmond*

Mitigation Measure 4-5 of the Final EIR in part requires the facility operator to pay a Mitigation Fee “to defray annual costs associated with collection and disposal of illegally dumped waste and associated impacts in North Richmond and adjacent areas.” The purpose of the “Memorandum of Understanding By and Between the City of Richmond and the County of Contra Costa Regarding Solid Waste Transfer Facility Host Community Mitigation Fees”, (MOU) between the City of Richmond and the County is to implement Mitigation Measure 4.5, to provide for the joint imposition of the Mitigation Fee irrespective of the final location of the various BMPC operations, and the joint administration of the mitigation funds for the benefit of the host community as identified in the EIR. Mitigation funds shall be used, as described in the Draft EIR, for the benefit of the host community.

By entering into the MOU, the County and City have agreed to jointly impose the Mitigation Fee on all solid waste and processible materials received at the facility (all BMPC operations including the WRC except those materials which are disposed of in the WCCSL). The amount of the Mitigation Fee for all solid waste transferred to other Republic landfills shall be \$2.76/ton, subject to CPI adjustment at the beginning of each calendar year. The amount of the Mitigation Fee for all other materials processed at the BMPC (except those materials which are disposed of in the WCCSL) shall be \$0.75 per ton (as adjusted annually pursuant to the CPI) if the rate charged by Republic and/or its Contractor(s) is more than \$10.00 per ton (as adjusted annually pursuant to the CPI) or 7% of the gross revenue received by Republic and/or its



BMPC Contractor(s) if the rate charged is less than or equal to \$10.00 per ton (as adjusted annually pursuant to the CPI). By entering this MOU, the City and County also agree that the Mitigation Fee monies collected from the Applicant will be paid to the County, held in a dedicated separate account and jointly administered for the benefit of the incorporated and unincorporated North Richmond area.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

### **Geology, Soils and Seismicity**

#### **Impact 5-5**

Settlement of the landfill under existing and/or proposed fill loads could impact existing and proposed structures supported on the landfill.

#### **Mitigation:**

a) Geotechnical studies would be performed for each proposed/renovated site structure to be located on waste fill that evaluate impacts of landfill settlement on building performance, as well as additional settlement, if any, caused by new structures, and recommendations included in construction plans and specifications;

b) Flexible utility connections would, if deemed necessary, be considered to reduce damage to utilities resulting from differential settlement between buildings and the surrounding ground;

c) Settlement of buildings would be addressed in WCCSL Post-Closure Plan with monitoring and repair as needed.

The following discussion of Impact and Mitigation Measure 5-5 pertains, in part, to the proposed WRC site at the former Soil Remediation Building on the WCCSL landfill. The applicant has elected to implement the PEA and build the WRC outside of the landfill in Area A.

Supporting Explanation: New facilities constructed at the proposed site may experience settlement as a result of consolidation of the underlying Bay Mud, as well as compression of the waste, if they are located over the waste fill(s). Structures could experience differential settlement across the building footprint, and between the building and exterior grades. Underground utilities connecting to the buildings could experience breakage if they are not properly designed.

The regulation of solid waste landfills is comprehensive, including federal Subtitle D regulations incorporated into the State's regulatory program, as well as specific state law

requirements embodied in statutes and Title 27 of the California Code of Regulations (“CCR”). The regulatory framework is set forth at pp. 5-11 through 5-14 of the Draft EIR. The mitigation measures identified, 5-5 and 5-6, are both premised on the application of prescriptive and performance standards set forth in 27 CCR sections 20240(d) and 27150 regarding foundations for engineered structures and geology and seismicity standards applicable to waste disposal units.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

<b>Impact 5-6</b>	Settlement of the landfill under new refuse and cover fill loads could impact lateral containment structures.
Mitigation:	<p>a) If new fill is placed for construction of the proposed WRC, additional studies would be performed to evaluate settlement, slope stability, and potential impacts on the integrity of the soil-attapulgitic slurry wall with recommendations included in construction plans and specifications.</p> <p>b) Periodic monitoring would be consistent with the recommendations of Mitigation Measure 5-6(a) to evaluate the condition of the soil-attapulgitic slurry wall and appropriate repairs made as necessary.</p>

The following discussion of Impact and Mitigation Measure 5-6 pertains, in part, to the proposed WRC site at the former Soil Remediation Building on the WCCSL landfill. The applicant has elected to implement the PEA and build the WRC outside of the landfill in Area A.

Supporting Explanation: Static stability is a measure of the ability of a natural or made slope and its foundation to withstand movements due to imposed loads. Stability is expressed in terms of a “factor-of-safety” (F.S.). An F.S. is the ratio of strength of the resisting material divided by the imposed loads due to gravity and any external forces, if present. An F.S. of less than one represents a condition where the imposed loads are greater than the resisting forces, which will result in deformation, while an F.S. greater than one indicates that the resisting forces are larger than the imposed loads. Typically, a factor-of-safety of 1.5 or greater is considered to provide adequate margin of safety against a slope failure in a static condition.

Dynamic stability is the ability of slopes to withstand the loads imposed during an earthquake event. There are two primary impacts that could affect the foundation or cover of the Class II landfill during a seismic loading condition: (1) deformation of the foundation soils due to liquefaction, and (2) deformation of the foundation materials due to shear failure. Liquefaction was discussed in Section D2 of this chapter and is not a likely mechanism for causing significant deformation over the majority of the site during earthquake loading. Dynamic slope

deformation due to shear failure has been evaluated by EMCON/OWT. Typically, the result of such an analysis is an estimate of the amount of deformation a particular slope will undergo as a result of an earthquake shaking. The level of acceptable deformation is generally considered to be the amount of deformation that can occur without affecting the cover and other environmental control systems.

The proposed WRC site is within about 8 to 10 feet of the soil-attapulgite slurry wall separating the Class I and Class II landfills. An additional barrier wall (Bay Mud and soil-cement-bentonite) surrounds the entire WCCSL. Large settlements could cause ground deformations, which may impact the integrity of the hydraulic barrier properties of these walls. However, the magnitudes of the expected settlements are not likely to be large enough to breach the walls.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Impact 5-8**

The combination of new fill placement and seismic shaking could cause slope deformations, which could damage the landfill cap and environmental control systems.

**Mitigation:**

a) A plan for inspection and as-needed repair of the GCL following an earthquake would be added to the Post-Closure Plan.

The following discussion of Impact and Mitigation Measure 5-8 pertains, in part, to the proposed WRC site at the former Soil Remediation Building on the WCCSL landfill. The applicant has elected to implement the PEA and build the WRC outside of the landfill in Area A.

Supporting Explanation: The Applicant's control measures incorporated into the Project include the following:

- a) Following an earthquake, an inspection program would be implemented to evaluate the extent of cracking of the cover materials, damage to LFG collection system, damage to leachate collection and pumping systems, global landfill sliding, and cracking of the barrier wall. Appropriate repairs would be pursuant to RWQCB Order No. R2-2002-0066.
- b) Under the seismic scenarios where the barrier wall is breached, an inward hydraulic gradient would be maintained prior to and throughout the repair (see Control Measure 5-1(c)).
- c) A slope remediation study would be performed, or a long-term slope maintenance program would be developed to address the consequence and possible repairs resulting from large seismically-induced permanent slope displacements.

- d) As recommended by EMCON/OWT, Inc. slope stability report, a probabilistic analysis of the permanent displacements would be performed to be used in developing a detailed earthquake response plan. The response plan would provide details on procedures to be followed for inspection of the site following major earthquakes, and on the slope maintenance requirement that may be triggered by significant displacements.

The Draft EIR concluded the probability of an MCE event occurring on the Hayward Fault or San Andreas Fault is low, which is in general agreement with the 30-year probabilities presented in the USGS Group (1999) discussed earlier. The analyses performed indicate lateral slope displacements on the landfill cover could be on the order of 12 inches, while displacements of the landfill sideslopes could be as much as 25 feet. This landfill slope deformation would likely result in damage to the landfill cap and GCL, irregular surface and related drainage issues, and potential distress to the containment structures (Figure 5-4 of the Draft EIR). As discussed under Impact 5-1, a post-earthquake maintenance and repair plan would be implemented by the Applicant. If the barrier wall is breached under seismic conditions, an inward hydraulic gradient would be maintained to control off-site migration of leachate or waste prior to and throughout the repair. Due to the relatively low permeability of the subsurface materials, it is unlikely large-scale, off-site migration of leachate or waste would occur.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Impact 5-9**                      Slope deformations or slope failure at the proposed WRC site could impact the soil-attapulgitic slurry wall.

Mitigation:                      If new fill will be placed for construction of the proposed WRC, additional studies would be performed to evaluate potential settlement, slope stability, and movement of the soil-attapulgitic slurry wall and recommendations would be incorporated into construction plans and specifications.

The following discussion of Impact and Mitigation Measure 5-9 pertains to the proposed WRC site at the former Soil Remediation Building on the WCCSL landfill. The applicant has elected to implement the PEA and build the WRC outside of the landfill in Area A.

Supporting Explanation: The Applicant's Project includes the following specific control measures:

- a) The inspection, monitoring and repair plans outlined in the Post-Closure Maintenance Plan would be followed.
- b) Following a significant earthquake (magnitude 6.5 or greater), the site would be inspected to evaluate the performance of the environmental control systems related to the Class I landfill. Slurry wall deformations in excess of 1 foot would

require a notification to DTSC and RWQCB within 14 days and repairs made pursuant to their recommendations.

The stability of the fill pad at the former Soil Remediation Building and related effects on the soil-attapulgitic slurry wall separating the Class I and Class II Landfills were evaluated by Woodward-Clyde Consultants in 1995. The building design uses geogrid reinforcement within the fill pad and a downslope berm. The expected lateral deformation of the pad during a seismic event would be limited to 3 to 4 inches. This level of displacement is not likely to significantly impact the 5-foot-wide slurry wall. However, localized repair of the soil-attapulgitic slurry wall (and the cover system) may be required.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Impact 5-10**

Ground shaking during an earthquake could affect building structures and associated improvements.

**Mitigation:**

To ensure proper structural design, a geotechnical report would be prepared for all new buildings with recommendations incorporated into construction plans and specifications (see Mitigation Measure 5-5(a)). The geotechnical report would discuss the potential for differential ground surface settlement and the need for flexible utility connections (see Mitigation Measure 5.5(b)).

Supporting Explanation: An earthquake on a nearby fault would cause ground shaking at the landfill site. If new structures are not designed to resist earthquake ground motions, damage could be sustained. Ground shaking with respect to liquefaction and slope stability were discussed in previous sections. The Applicant's Project includes the following: new buildings would be designed to meet the 1997 UBC Seismic Zone Factor 4 standards, and constructed in accordance with all applicable building codes and regulations. The application of prescriptive and performance standards for earthquake resistant construction would mitigate this potential impact to less than significant.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Water Resources**

**Impact 6-4**

The proposed Project could produce increased runoff that could result in substantial erosion or siltation on or off site, or otherwise degrade surface water quality.

Mitigation: Upon completion of the additional biosolids spreading trials per Control Measure 6-4(d), the Applicant would prepare a Progress Report for RWQCB review and approval. The Progress Report would include, at a minimum, the following:

- Purpose of Biosolids Spreading
- Approach and Methodology
- Results
- Environmental Controls
- Conclusions and Recommendations
- Other Components Deemed Necessary by the RWQCB

The Progress Report should demonstrate the maximum acceptable biosolids-loading rate, given available site area and physical constraints and the need to maximize drying and to control runoff.

Supporting Explanation: The Applicant's control measures include the following:

- (a) A Notice of Intent and revised SWPPP related to proposed operations would be submitted for approval by the Executive Officer of the RWQCB; Best Management Practices would be implemented for control of storm water.
- (b) The existing Drainage, Erosion, and Sediment Control Plan would be modified pursuant to County LUP No. 2054-92, as amended by LUP No. 2043-94, and City CUP No. 92-53. The FDIP would then be finalized and if amended use permits are obtained, the Applicant would comply with permit conditions.
- (c) Modified or new Solid Waste Facility Permits would be obtained from the LEA and CIWMB for the landfill, Composting Facility, and WRC and permit conditions would be followed.
- (d) Further testing of biosolids spreading would be conducted prior to full-scale implementation to refine the rates and methods of application, under the review and oversight of the RWQCB. Revised permits would be obtained as necessary and the Applicant would abide by permit conditions.
- (e) BMPs at the Composting Facility would be employed that would optimize applied water to the windrows while minimizing the generation of leachate.

The proposed Project involves several new activities, but generally comprises an expansion of existing operations in the context of increased materials receiving and extended hours of operation. The WCCSL is regulated under NPDES Permit No. 207S005532 and the Applicant has implemented a Storm Water Pollution Prevention Plan (SWPPP) for the site. The Applicant has also certified that all non-storm water discharges to storm water conveyance systems have been eliminated. The application of the standards prescribed by the RWQCB and

the CIWMB State Minimum Standards, together with the inclusion of the Applicant's control measures would mitigate this impact to a level of non-significance.

Expanded operations would expose more materials to rainfall and thus potentially degrade the quality of the storm water runoff. Water that comes into contact with these materials could be affected by such constituents as nitrates from organic material; sulfate and sulfur from construction debris and organic material; residual pesticides remaining on organic material; metals from organic material and construction debris; increased total dissolve solids levels from organic and construction debris; and petroleum hydrocarbons associated with cleaning of equipment and inks and glues contained within paper products.

**Composting/Wood Recovery.** The drainage plan for the Composting/Wood Waste Processing Area includes berms, down drain systems, storm drain systems, the location and direction of flow in perimeter drainage channels, and the discharge points for runoff water. Facility design includes a minimum grade of 5 percent in the windrow areas and a minimum of 1 percent grade in the facility's perimeter drainage channel.

The maximum size of the Composting Facility would be 40 acres. For purposes of annual runoff calculations, the Applicant calculated that 29 acres of the total 40 acres would generate 5 million gallons of runoff, which includes 335,000 gallons per year of compost leachate. Normally, compost leachate would be collected and re-used to add moisture in the composting process. Alternatively, compost leachate collected into the Area A basin can be discharged to the WCWD treatment plant and eventually the City of Richmond plant with the Class II landfill leachate. The drainage runoff from major storms would flow to the Area A retention basin. The diluted overflow runoff from the Area A basin would be directed to the 68-acre diked Area B pond.

The remaining 11 acres of the Compost Facility that does not drain eastward would either not be used during wet weather, and hence there would be no runoff, or the materials placed in that area would include the finished compost or wood chips where the runoff would have low pollutant potential. This drainage would sheet-flow off the area, pass through the gravel filter (the same material used for siltation control for the concrete rubble processing runoff around the southern, western and northern perimeter of the facility), and then runoff would sheet-flow down the grassy landfill slope.

**Concrete/Asphalt Processing.** Figure 3C-1 in Appendix 3C of the Draft EIR shows the drainage plan for the concrete/asphalt recycling operation to be located at the western end of the landfill's central plateau. Facility operations could be a source of sediment and other pollutants. The Applicant proposes to control sediment through the use of defined drainage grading and use of silt barriers (geofabric fences, straw and shredded wood mulch, and hay bales). Vegetative growth on the landfill slopes would serve to filter sediment and silt particles.

**Waste Recycling Center.** The WRC is proposed to be located in Area A. Drainage at the front of the building would be diverted to the northern and southern sides. Because rainfall drainage waters from the front apron would be considered to be potentially contaminated from oil dripping off vehicles and when waste unloading overflows into this area, oil/water separators would be provided to receive these drainage waters. The separators would

discharge to the south bench drain that leads eastward to the Area A retention pond. The roof gutter drains for the processing building would be designed to appropriately discharge the water around the building. The wash down wastewater from cleaning the tipping floor would be processed through an oil/water separator.

**Wet/Dusty Material Blending.** The wet/dusty material blending would first occur on the landfill's central plateau at the Waste Shuttle Facility. These materials would be hauled in covered trailers and placed in the building and stockpiled to be protected from the rain and prior to processing. The drainage plan includes berms and channels to divert runoff from the building with most of it diverted to the Area A siltation control pond and some to San Pablo Creek. The drainage from the building and apron area would be directed to oil/water separators located at the end of the facility and then to the Area A basin.

At the landfill central plateau, runoff controls would be established to direct runoff to the Area A basin. The Applicant proposes to conduct mixing operations under controlled conditions. During wet weather, mixing would be done either under a roofed area, in a large metal mixing chamber that could be tarped, or the mixing would be temporarily suspended.

**Soil Reclamation Facility.** The Soil Reclamation Facility would involve the reclamation of non-contaminated soils in an area adjacent to the composting and wood recovery operations. Drainage would be managed as discussed above for that area.

**Biosolids/Dredged Material Spreading.** This proposed activity involves the spreading of wet dredged materials and/or biosolids from the WCWD treatment plant on the southern or eastern slopes of the closed landfill during the dry season, which is about a 6-month period, April through October. These materials may also be used as a soil amendment on the final capped areas of the landfill. Figure 3H-1 of the EIR shows the drainage plan for landfill slope spreading operation.

Liquid biosolids application to the southern and eastern landfill sideslope areas would require the application and disposal of large quantities of water. It is proposed that 24 million gallons (mg) of digested sludge (94 to 98 percent moisture) be land applied per year on about 22.5 acres. The Applicant has evaluated two application rates, 1 gallon per 5 square feet (sq. ft.) and 1 gallon per 15 sq. ft.

In order to dry 24 million gallons (MG) of liquid biosolids on 22.5 acres, a total depth of 39.2 inches would need to be applied. On an annual basis, there would need to be 122 or 367 applications per year. Over a 6-month drying period, such as is proposed, these applications would be doubled to 244 to 734 (1.4 to 4 applications per day). Either a much larger drying area is needed, or projected quantities of liquid biosolids would need to be reduced, in order to avoid conditions of over saturation, increased runoff, and water quality impacts.

Drainage control would be provided to prevent water from entering the processing areas and to allow it to flow around and away from the areas. An existing berm at the base of the slopes would be raised in height to contain runoff and direct the water to sump pumps. Grasses would be planted in the ditches behind the berms to transpire water and for nutrient absorption. During the latter part of the wet weather season, the Applicant may be able to pump the runoff



back to the top of the slopes and reapply it to the areas where it would evaporate. Alternatively, the runoff water would be pumped into the leachate piping system used for the Class I HWMF treated leachate discharge to the WCWD sewer. No Class I leachate would be pumped during this time. Currently, at the WCWD biosolids drying lagoons, plant operators decant rainwater off the lagoons and pump it back to the treatment plant headworks.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

### **Traffic and Circulation**

**Impact 8-3**                      Projected increases in Project-related traffic could further deteriorate pavement conditions on Parr Boulevard.

Mitigation:                      A pavement monitoring program would be undertaken by Applicant for the Parr Boulevard connection to Richmond Parkway. The program would provide before and after video evidence of pavement conditions, and may require the posting of a pavement repair bond. Applicant would coordinate with the Maintenance Division of the County Public Works Department regarding the details of the monitoring program and any requirements for road repair should they become necessary.

Supporting Explanation: The need for future pavement improvements will be based on calculations of the Traffic Index (TI). The TI is a logarithmic scale, which indicates the ability of the pavement structure to support repetitive wheel and axle-loads of large trucks. TI ratings of 7.0 or less are utilized on local streets, which are not expected to carry appreciable amounts of truck traffic. Higher values of up to 9.0 or 9.5 are used on major arterial streets, such as Richmond Parkway with heavy truck traffic. In California, TI values are calculated in accordance with procedures specified by CalTrans.

While the number of trucks added by the proposed Project is not significant from a traffic capacity standpoint, the addition of just a few heavy trucks may cause deterioration of some pavement sections. The local public roadways that would be affected by the proposed Project are Parr Boulevard and the Richmond Parkway. The existing pavement conditions on Parr Boulevard appears to be substandard and in need of pavement maintenance. The County Public Works Department reports that Parr Boulevard was repaved with a double-chip seal in 1987. Prior to this action, there were pavement improvements to Parr Boulevard in 1975 and again in 1983. With the exception of some minor patching, there have been no other changes in this section of Parr Boulevard and Garden Tract Road since 1987.

The Richmond Parkway, including Castro Street, was constructed with a TI of 10.5 and 11.0. As such, the roadway is designed to handle high volumes of truck traffic, and meets the TI requirements. Due to this high level of design standard, pavement impacts on the Parkway due to the proposed Project would not be significant.

Mitigation Measure 8-3(a) was also included in the EIR for closure of the HWMF (Brown and Caldwell, Draft EIR on the WCCSL Hazardous Waste Management Facility Closure and Postclosure Plans, September 1998).

Having reviewed and considered the information contained in the FEIR, the Board finds that the impact would be less than significant.

**Biological Resources**

**Impact 9-1**

The proposed Project could have a substantial adverse effect on habitat for special-status species. This impact is considered potentially significant.

**Mitigation:**

(a) The interpretive program proposed by the Applicant would be developed in consultation with the Bay Conservation Development Commission (BCDC) and DFG to educate Trail users of the sensitivity of the marshland and open water habitat to wildlife, the prohibition on take and harassment of special-status species, and the requirement of staying on the Trail to minimize disturbance to sensitive wildlife.

(b) Adequate controls would be developed as part of the interpretive program to prevent human access into the San Pablo Creek Marsh habitat along the Phase 3 segment of the Trail north of the WCCSL. This may require use of exclusionary fencing, and shall at minimum include installation of permanent signage at 100-foot intervals which states:

No Trail Access Sensitive Wildlife Habitat Visitor Access Prohibited
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(c) As currently proposed, dogs would be prohibited from using the Trail. Permanent signage would be installed as part of the interpretive program at the trailhead and as separate permanent signs within 100 yards of the beginning of the northern and southern trail segments explaining the sensitivity of the area and clearly state "No Dogs Allowed." Signage would refer users to other local shoreline parks where dogs are permitted (e.g. Berkeley Shores Park, Point Isabel). Experience gained from operation of the Trail would be used by the appropriate entities to determine whether additional enforcement measures are necessary and possible funding measures.

(d) As directed by appropriate agencies, the Applicant would coordinate efforts on predator control of feral cats, dogs, and red fox.

(e) All construction activities on the levees, including installation of any Trail improvements and the barrier landscape plantings, would be prohibited during the nesting season for salt marsh dependent bird species, from February 1 through July 31.

(f) Trail improvements would be restricted to uplands, the tops of existing levees, and the existing roadway along the south side of San Pablo Creek to minimize further disturbance in the adjacent marsh and riparian habitats.

(g) Due to the possible hazard to trail users, the Bayside Trail (Barrier) Planting Recommendation would be revised to eliminate poison oak from the revegetation planting palette and from any future landscaping plans for the Project.

Supporting Explanation: The Applicant's control measures included in the Project include:

- a) Dogs would not be permitted on the Trail.
- b) An interpretive program would be implemented explaining the sensitivity of the marshland habitat.
- c) The Trail (Barrier) Planting Recommendations developed by Environmental Stewardship & Planning would be implemented to control the spread of invasive exotics and to establish a protective buffer of native vegetation between the proposed Trail alignment and adjacent marsh and open water habitats.

Proposed BMPC operations are not expected to have any significant adverse impacts on essential habitat for special-status species. No special-status plant species occur on portions of the WCCSL site proposed for improvements, including the levee system where the Phase 1, 2, and 3 segments of the Public Access Trail (Trail) are proposed. The activities associated with the continuation of landfill activities would be contained on previously disturbed upland portions of the WCCSL that do not provide important habitat for special-status species. Raptors and other bird species that may forage on the uplands of the WCCSL are acclimated to human activities associated with the ongoing landfill and BMPC operations. The EIR did not identify significant impacts on these species.

Portions of the Trail would be located adjacent to sensitive marshlands and riparian areas known to support special-status species. The improvements associated with Phases 1, 2 and 3 of the Trail would follow the existing maintenance road on the levee along the south and west edge of Area B, the maintenance road along the north side of the Class II landfill, and the south side of San Pablo Creek. No direct impacts on special-status species are anticipated as a result of construction of Trail improvements for Phases 1, 2, and 3. However, the indirect effects of increased human activity, and particularly any access by dogs accompanying Trail users, could

result in a significant impact to sensitive species that utilize the marshland and open water habitat. Measures are required to control possible disturbance and unauthorized take of a listed species.

An existing slough south of, and adjacent to, the Phase 1 alignment serves as a barrier to human access to Wildcat Marsh. The San Pablo Creek channel prevents human access to the sensitive marshlands north of the creek. A segment of the Phase 3 Trail on the north side of the WCCSL site borders sensitive marshlands in the San Pablo Creek Marsh for a distance of approximately 600 feet. This marsh is known to support salt marsh harvest mouse, salt-marsh wandering shrew, San Pablo vole, California clapper rail, and other sensitive wildlife species. Unless adequate measures are taken to secure the area, informal access may lead to increased disturbance, trampling of marsh vegetation, and possibly loss of listed species.

Several control measures have been proposed by the Applicant, as part of the Project to address potential indirect impacts on sensitive habitat and wildlife associated with the Trail. These include a prohibition on any dogs along the trail, an interpretive program explaining the sensitivity of the surrounding marshland habitat, and implementation of *Bayside Trail (Barrier) Planting Recommendations* intended to control the spread of invasive exotics and establish a protective buffer of native vegetation between the proposed trail and adjacent marsh and open water habitats (Appendix 9-A of the Draft EIR). The barrier plantings would be installed along the upper elevations of the levee along the south side of Areas B and C to discourage any access into the adjacent marsh and mudflats at low tide. Species used in the plantings would include thorny shrubs and vines such as wild rose and blackberry, to discourage human access and also provide protective cover for wildlife. No specific measures have been proposed as part of the Project to prevent access to the San Pablo Creek Marsh area north of the WCCSL along the south side of San Pablo Creek. However, adequate controls are provided to prevent access to the San Pablo Creek Marsh area north of the WCCSL along the south side of San Pablo Creek by Mitigation Measure 9-1 (see above) pertaining to this segment of the Trail system; therefore, no significant adverse impacts on special-status species are anticipated for the Phases 1, 2 and 3 portions of the alignment.

The proposed Phase 4 Trail alignment would follow the outer levee around the southwest and north sides of Area C, and would require two new bridge crossings over existing breaches in the levee system. Modifications to the shoreline to improve the levee and accommodate the new bridge structures would also be required. Human access would be provided to the portion of the levee now separated from the mainland. This levee is used as protected resting, roosting, and nesting habitat by a large number of birds. Human access along this segment of the Trail would have a significant impact on the habitat value of the isolated levee to wildlife, as discussed under Impact 9-4. For this reason, Phase 4 has been eliminated from the Trail plan in the PEA.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Impact 9-3**

The proposed Project could adversely affect wetlands.

**Mitigation:** Any modifications to the shoreline of San Pablo Bay required as part of the construction of the staging area for the interpretive program at the southern end of Area C, would be coordinated with the U.S. Army Corps of Engineers and BCDC and appropriate authorizations to assure compliance with prescriptive and performance regulatory standards are to be obtained prior to any modifications to the shoreline and open water of San Pablo Bay.

**Supporting Explanation:** No jurisdictional wetlands would be affected by the proposed Project. Improvements associated with the BMPC would be restricted to the existing landfill area. Improvements for the Phase 1, 2, and 3 segments of the Trail would be sited along the top of the existing levee system, service road along the north side of the landfill, and existing access road along the south side of San Pablo Creek, avoiding direct disturbance to jurisdictional habitat. Implementation of a required SWPPP for the proposed Project as discussed in Chapter 6, Section A.7 of the EIR, would serve to adequately mitigate any potential indirect impacts on wetlands as a result of proposed Project activities. The EIR concluded that implementation of the Phase 4 alignment would have a significant impact on wildlife use of this area, as discussed under Impact 9-4 below, and thus, was eliminated from the Trail plan.

An interpretive program is currently being developed in conjunction with the Trail as part of the Project that would provide access to the shoreline at the southern end of Area C. A staging area is proposed at this location for use by kayakers as part of an educational program for school children administered by the Save the Bay Association. School children would be escorted by guides on kayaks through the surrounding tidal sloughs and open water of the San Pablo Bay. The proposed staging area currently has little or no wetland vegetation and the levee slope is covered with concrete riprap. No dock or pier is currently proposed as part of the staging area. If these types of improvements are proposed in the future they would require modifications to the jurisdictional waters along the shoreline of the San Pablo Bay. Any modifications to the shoreline and open water of San Pablo Bay must be coordinated with the Corps and BCDC.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Impact 9-4** The proposed Project could have significant impacts on wildlife habitat and wildlife movement opportunities.

**Mitigation:** (a) The Phase 4 alignment of the Public Access Trail is eliminated from the proposed Project to avoid the required resulting disturbance to shoreline habitat on this portion of the site and prevent the potential disruption to wildlife habitat along the existing isolated levee segment. The proposed Phase I Trail improvements from the southern end of the mainland levee along the west side of Area C to the first breach in the outer levee

would also be eliminated from the proposed Project, serving to minimize potential disturbance to approximately half of the open water and mudflat habitat in Area C. Split rail fencing or similar barrier would be installed within 10 yards of the point where the levee narrows north of the proposed kayak staging area.

(b) Permanent signage would be installed as part of the required interpretive program at the southern end of the levee along the west side of Area C which deters visitor access to this segment of the levee. The signage would be installed at 20-foot intervals across the width of the levee, within 10 yards of the point where the levee narrows north of the proposed kayak staging area. The signage would state:

No Trail Access  
Sensitive Wildlife Habitat  
Visitor Access Prohibited

(c) Permanent signage would be installed as part of the required interpretive program on both sides of the water access at the proposed kayak staging area to inform kayak users that access into the sloughs of the coastal salt marsh to the southeast is prohibited during the nesting season to prevent possible disturbance to rails and other wildlife. The signage would state:

Sensitive Wildlife Habitat  
No Kayak Access to Marshland  
and Sloughs  
During Bird Nesting Season –  
February 1 through August 31

**Supporting Explanation:** Proposed BMPC operations would not have any significant adverse impacts on wildlife use of the WCCSL. Improvements associated with the BMPC and landfill operations would be restricted to the disturbed uplands on the site. Wildlife associated with this portion of the site are relatively common and are already acclimated to intensive human and vehicle activity in this area, and no significant adverse impacts are anticipated.

Most of the proposed Trail improvements would be limited to the existing levees, maintenance roads and access road onto the site. Although some segments of the Trail system would border sensitive marshland habitat, the interpretive program, prohibition on dog use, and barrier plantings described under Impact 9-1 above would serve to minimize any disturbance to special-status animal species and other wildlife associated with the adjacent marshland and the riparian corridor of San Pablo Creek. With appropriate controls that are either proposed as a part of the Project or included as mitigation measures, no long-term significant adverse impacts on wildlife use are anticipated with the Phase 1, 2, and 3 Trail alignments.

As discussed under Impacts 9-1 and 9-3 in the Draft EIR, improvements associated with the Phase 4 segment of the Trail would require construction of two new bridges and would create new human access to the currently isolated levee. This isolated levee provides important resting, roosting, and nesting habitat for birds. Human access associated with the Phase 4 Trail improvements would greatly diminish and possibly eliminate use of this levee by many species, which would be a significant adverse impact of the Project (Figure 9-4 of the Draft EIR). This significant adverse impact is the basis for elimination of the Phase 4 trail alignment.

The proposed staging area and education program at the southern end of Area C would be supervised by interpretive guides associated with the Save the Bay Association. Kayaking in the sloughs and open water of San Pablo Bay could result in birds flushing and moving to another location further from the disturbance. However, the program would be supervised by interpretive guides explaining the sensitivity of the surrounding marsh and San Pablo Bay ecosystems, would be of short duration and relatively infrequent in occurrence, and is not expected to have a significant impact on wildlife use in the area.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

### **Air Quality and Odors**

#### **Impact 10-1**

The construction of various Project elements could result in dust nuisance.

#### Mitigation:

- (a) All active construction areas would be watered at least twice daily and more often during windy periods (20 mph or higher).
- (b) All trucks hauling soil, sand, and other loose materials would be covered or required to maintain at least two feet of freeboard.
- (c) All unpaved access roads, parking areas and staging areas at construction sites would be paved, watered at least twice daily or more often if windy, or receive applications of non-toxic soil stabilizers.
- (d) All paved access roads, parking areas and staging areas at construction sites would be swept daily with water sweepers.
- (e) Inactive construction areas would be hydroseeded or non-toxic soil stabilizers would be applied.

- (f) Exposed stockpiles (dirt, sand, etc.) would either be enclosed, covered, watered twice daily or more often if windy unless a non-erosive soil crust is maintained, or receive application of non-toxic soil stabilizers.
- (g) Traffic signage would limit traffic speeds on unpaved roads to 15 mph.

Supporting Explanation: The proposed Project would result in temporary construction emissions (equipment exhausts and fugitive dust) during closure of the Class II landfill and development of improvements and structures required for proposed operations and uses on the Project site. Impacts related to closure of the Class II landfill were evaluated in an Initial Study/Negative Declaration completed in 1996. Impacts would be localized and variable. Construction impacts might last for a period of weeks or months for any one Project element. The application of the measures described in the mitigations for this impact, which are designed to limit or eliminate the potential for fugitive dust emissions, would mitigate this impact to a level that is less than significant.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Impact 10-2**

Emission increases from on-site sources would exceed the BAAQMD significance thresholds for PM<sub>10</sub>.

**Mitigation:**

The Applicant would, at the earliest practical date, prepare applications to the BAAQMD for new sources proposed to be located at the site, obtain required BAAQMD permits, and comply with all permit conditions, including prescriptive and performance standards administered by the BAAQMD to lessen or eliminate PM<sub>10</sub> emissions.

Supporting Explanation: The Applicant's control measures incorporated into the Project include the following:

- a) The main access road would initially be graveled, treated with non-toxic soil stabilizers and watered at least twice daily. After land settlement, the main access road would be paved.

**Waste Recycling Center:**

- b) Handling and sorting of mixed waste would occur within an enclosed WRC or partially enclosed structure.
- c) Roads, unloading areas and the processing area of the WRC mixed waste processing area would be paved, and sweepers or vacuums would be used to keep these surfaces clean.



- d) Periodic watering at least twice daily, or more often when windy, would be used on internal roads as needed at the WRC, and wind fences would be strategically located to control wind erosion.
- e) Waste would be pre-screened to avoid dusty materials.

**Green Waste/Woodwaste/Composting:**

- f) Green material and wood shredding/screening equipment would be equipped with water sprays.
- g) Wood waste, and composting materials would be watered as unloaded, the surfaces of the unloading areas would be routinely sprayed with water during the dry season, and materials would be periodically watered during the dry season prior to grinding.
- h) Green waste, wood waste, and composting materials would be pre-screened to avoid dusty materials.
- i) Windrows and intervening pathways would be watered prior to turning of windrow.
- j) Internal roads in the Organic Materials Processing Area would be watered at least twice daily, more often when windy.
- k) Finished stabilized compost would be screened and loaded during low wind speed conditions (less than 20 mph); handling of compost would be suspended if the wind speed increases (above 20 mph).
- l) Berms would be used in the Organic Materials Processing Area to provide an upwind barrier to reduce wind effects.
- m) Wind fences would be strategically located in the Organic Materials Processing Area to control wind erosion.

**Wet/Dusty Material Blending:**

- n) A three-sided shelter would be constructed at the Wet/Dusty Material Blending Facility with fabric roof to contain dusty materials.
- o) Dusty materials would be blended with high moisture wastes to help control fugitive dust.
- p) Dusty materials would be stored in plastic bags until needed.

**Soil Reclamation:**

- q) Water sprays would be used on the conveyor at the Soil Reclamation Facility.
- r) The apron on two sides of the soil reclamation storage area would be graveled to provide an all-weather surface.
- s) Periodic watering (at least twice daily, more often when windy) would be conducted at the soil reclamation operation areas for dust control.

**Concrete/Asphalt Recycling:**

- t) Water sprays would be used on concrete/asphalt crushers, screens and conveyors.
- u) Dust suppressants would be used and regular watering (at least twice daily, more often when windy) would be conducted at the Concrete/Asphalt Recycling Facility for general dust control.

Emission increases from on-site sources would exceed the BAAQMD significance thresholds for PM<sub>10</sub>. On-site emissions consist of process emissions (from stationary equipment and facilities), mobile equipment, vehicles operating on and off the site, and fugitive dust generated by the action of vehicles and equipment on unpaved surfaces.

The Draft EIR provides a detailed discussion of control measures proposed by the Applicant in addition to Mitigation Measure 10-2 (see page 10-18 through 10-21 of the Draft EIR). A broad range of control measures have been proposed by the Applicant for all aspects of BMPC operations. Control measures and Mitigation Measure 10-2 are designed to control on-site emissions. Despite these measures, this impact cannot be feasibly mitigated to a level that is less than significant. Estimates for existing, 2008, and 2015 emissions of PM<sub>10</sub> substantially exceed the BAAQMD's standard threshold of significance of 80 pounds per day.

In the Draft EIR, Tables 10-4 through 10-6 showed the estimated existing and future Project-generated emissions for 2008 and 2015 from on-site and off-site activities. In the Final EIR Responses to Comments document, Tables 10-4, 10-5 and 10-6 were revised to reflect updated emissions estimates. While the numerical value of impact shown in Tables 10-4 through 10-6 has increased slightly, conclusions regarding the significance of impacts are unchanged.

Emissions of ozone precursors (ROG and NO<sub>x</sub>) would decline from existing levels primarily due to a gradual decline in the LFG generation and current and future State-mandated emissions standards for heavy duty off-site road vehicles and equipment. Existing on-site PM<sub>10</sub> emissions were calculated to be about 413 pounds per day. The proposed Project would result in an increase in on-site emissions of PM<sub>10</sub>, primarily due to the proposed increase in throughput (materials processed) for the asphalt and concrete recycling operations and composting.

Calculated PM<sub>10</sub> emissions were revised in the Final EIR, and shown to increase from the existing 413 pounds per day to 1,479 pounds per day in 2008. The estimated emission for 2015 remained unchanged at 2,206 pounds per day. The net increase of PM<sub>10</sub> for both on and off site of 1,084 pounds per day in 2008 and 1,809 pounds per day in 2015 (see revised Tables 10-5 and 10-6 in Final EIR) would exceed the BAAQMD's threshold of significance of 80 pounds per day.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce the level of PM<sub>10</sub> emissions, but that this impact would remain significant.

**Impact 10-5**

The Organic Materials Processing Area and expansion of the Composting Facility could create objectionable odors

Mitigation:

- a) The turning of the windrows would be limited when the wind is blowing inland toward potential receptors. Turning and screening operations would be curtailed when wind speeds exceed 20 miles per hour (mph) toward developed areas.
- b) An appropriately sited wind monitoring station would be installed with an alarm to indicate the occurrence of winds greater than 20 mph.
- c) A one-year composting demonstration project would be conducted under the review and oversight of the LEA and the BAAQMD. The demonstration project would focus on all feedstocks with a high nuisance odor potential and would identify composting operations and controls necessary to assure an efficient operation that would control odors under various climatic conditions. Based on the results of the demonstration project, the LEA and the BAAQMD would determine under what conditions these feedstocks could be used at the Composting Facility as part of the Composting Facility permitting process. The demonstration project shall include, but not be limited to:
  - The scale of the demonstration project would duplicate the pile size and operational factors of the planned facility, so that valid data are collected at full-size operation.
  - The span of feedstock combinations would encompass the range of expected future options, concentrating on worst-case combinations from processing, operations, and odor standpoints.
  - Monitoring during the demonstration period would include standard compost processing monitoring parameters as well as odor emission data during different operating and climate/wind conditions. Odor data would include emissions of critical constituents such as reduced sulfur compounds and reduced nitrogen compounds, as well as total odor emission data collected via odor panel with flux chamber protocols. The Applicant shall help design the odor monitoring program with regulatory agency input and oversight. Downwind odor data would be collected concurrent with pile or source emission data to correlate the impacts.
  - Odor impacts from demonstration scale will be extrapolated for the full-scale system through odor modeling or similar approach that achieves valid predictions of odor from the large proposed system.

- Odor data collection would be identified for any compost leachate liquid or storm water runoff liquid coming from the demonstration piles/area.

Supporting Explanation: The Applicant's control measures incorporated into the Project include:

- a) The Applicant would work with the LEA to assure facility compliance with the OIMP.
- b) Food processing industry materials would be rapidly incorporated (within hours) with other compostible materials, shredded materials, or compost.
- c) The windrows would be turned on an average of twice per week to maintain aerobic conditions.
- d) A monitoring program would be implemented to track the composting process and implement operational adjustments as necessary.
- e) The operations areas would be regraded to promote drainage and prevent ponding of compost leachate.

Currently at the WCCSL, the average daily throughput of compostables is about 27 tons per day (365 days per year average or TPD7), or about 10,000 tons of compostables received per year. Under the proposed Project, up to 164,300 tons of compostables could be processed per year, which is equivalent to about 450 TPD7. The physical size of the Composting Facility would be increased from the existing 18 acres up to 40 acres to allow flexibility in the operating boundary with the proposed relocated concrete/asphalt processing area (see Figure 3-3 in Chapter 3, Project Description of the Draft EIR). Additionally, composting feedstock materials would be expanded to also include food wastes, food processing industry wastes, biosolids (wastewater sludge), mixed waste paper, and agricultural residues (Appendix 3B).

The increase in types and quantities of feedstock to be processed, as well as the physical expansion of the composting operations, would increase the potential for nuisance odors at the Composting Facility. Of the various composting technologies in use, windrow composting method in place at the WCCSL, has a greater risk of odor production. However, there is long-term experience with full-scale operations throughout the United States. Additionally, the WCCSL is well buffered in this industrial setting, away from sensitive receptors, on the WCCSL landfill facility. Wind conditions are also favorable, and as demonstrated in the section 10 of the EIR, wind at the site is blowing away from developed areas 70 percent of the time. Seasonally, the wind at the WCCSL is predominantly from the south during February through November. During December and January, the winds are predominantly from the north. BAAQMD enforcement records over the last 5 years indicate the WCCSL has not received any violation notices, no confirmed odor complaints, and one unconfirmed odor complaint. Thus, pursuant to the BAAQMD criteria, the WCCSL has not caused a significant odor impact.

The composting process is proposed to continue to be conducted year-round. As described in Appendix 3B of the EIR, initial composting operations include the use of shredding,

conveyors, and screening equipment. The shredded materials are then formed into windrows approximately 14 to 18 feet wide at the base and 6 to 8 feet high. An 8- to 12-foot-wide equipment access road separates the windrows. Active composting in the windrows requires 8 to 12 weeks, during which time water is applied, the windrows are turned for aeration, and the necessary operation monitoring (such as checking temperature within the windrows) is conducted. Following the 8- to 12-week period, the composted materials are placed in maturing piles and, when sufficiently matured for its intended end-use purpose, the compost is screened and removed from the site.

The main odor sources at the Composting Facility relate to the following: initial receipt, storage, and processing of the feedstock materials; active compost windrows and, to a lesser extent, the compost maturing piles; and ponding of water in the operations area that has infiltrated the storage piles and windrows during the wet season (compost leachate). Odors from composting are principally the result of reduced nitrogen and sulfur compounds caused by partial anaerobic conditions. Storage of runoff water in the Area A retention basin would also be an odor source, but this water is expected to be substantially diluted and has not been and should not be a source of nuisance odors in the future.

The Applicant's Draft Report of Composting Site Information (RCSI) addresses several operational and control measures to control odors, including the design, operation, monitoring, and site improvements associated with the proposed Composting Facility. According to the Applicant's RCSI, the Applicant would utilize best management practices, including rapid incorporation of food wastes and food processing industry waste with other compostable materials, and use shredded materials or compost to prevent nuisance odors; frequently turn the windrows to promote aeration; and frequently regrade the operations area to promote drainage and prevent ponding of compost leachate. The Applicant's OIMP is included as Appendix 10C of the EIR.

The Applicant is proposing to expand the windrow composting operation from green and wood waste and unprocessed food waste (e.g., uncooked fruits and vegetables) to include feedstocks with a high nuisance odor potential, such as food wastes, biosolids, agricultural residues and waste (including manure and stable waste). Composting of these materials during the rainy season would be of particular concern as rainfall could saturate the windrows and possibly lead to creation of anaerobic conditions. Turning the windrows in the early stages of the composting process has a high odor potential since the internal portion of the pile can turn anaerobic due to lack of oxygen. All necessary operational details have not yet been developed by the Applicant that can assure nuisance conditions related to odor do not occur. Further operational experience is needed with these feedstocks to address the needed mix of these feedstocks with processed green and wood waste to achieve the optimum C/N ratio; the need for processing restrictions; the need for seasonal use restrictions; the need to consider alternative composting technologies; as well as any other needed measures to control odors. The required Mitigation Measure 10-5 would reduce this impact to a level that is less than significant.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Impact 10-7**

Application of liquid anaerobically digested sludge to the southern and eastern sideslopes of the closed landfill could create objectionable odors. This impact is considered potentially significant.

**Mitigation:**

- a) The feasibility of WCWD providing short-term lagoon storage (2 to 3 months) of anaerobically digested sludge (i.e., a slurry in a lagoon) with a liquid aerobic cap would be demonstrated and evaluated. This evaluation shall include, but is not limited to, the following measures:
  - Short-term lagoon storage approach would be demonstrated to reduce odor impacts with spraying of sludge on the landfill sideslopes.
  - Volatile solids reductions from lagoon feedstock to lagoon withdrawal material would be identified.
  - Odor monitoring at the short-term lagoon storage system would be continued to confirm that this storage system in itself will not cause an odor problem.
  - Operational criteria would be determined for lagoon feed rates and loading, sludge withdrawal, cap water maintenance, maintaining “aerobic” cap conditions, cap water covering all sludge material, lagoon supernatant handling, etc.
- b) A liquid biosolids spreading demonstration project work plan would be prepared, under the review and oversight of the LEA and BAAQMD and demonstrate whether residual odor would be consistent with impact standards of the BAAQMD and this EIR. The results of Mitigation Measure 10-7(a) would determine whether the sludge, which has received short-term storage, can be integrated into the work plan. The work plan shall include, but not be limited to, the following items:
  - Identify the types of biosolids that will be spread in the demonstration program; i.e., digested sludge direct from digesters, sludge removed from lagoon after “X” months of storage, etc. Identify the analytical work that will be completed on such material to help identify odor impacts of spreading (percent solids, percent volatile solids, pH, ammonia, temperature, total reduced sulfur compounds (TRS), etc.

- Identify/define data that will be collected at the spray application site including area loading rates, spray flow rates, and nozzle pressures, spray distances, and data collected during spraying such as odor monitoring in the vicinity and downwind. Spraying would be conducted in different climate/wind conditions to establish potential limitations for full-scale operation.
  - Identify/define data that will be collected on water that runs off the application areas: quantity of water and data on BOD, SS, nutrient content (including ammonia). Fecal coliform density of any runoff solids would be determined.
  - Identify the various conditions under which spraying will be limited such as time of day, wind/atmosphere conditions, precipitation conditions, frequency of application, and other conditions.
- c) The liquid biosolids spreading demonstration project would be conducted under the review and oversight of the LEA and BAAQMD, and a report of findings prepared. The Applicant would demonstrate that liquid biosolids can be spray-applied as proposed without creating nuisance odor conditions. The LEA and BAAQMD would then determine under what conditions liquid biosolids can be spray-applied to the landfill slopes to provide the required odor control. The work plan shall include, but not be limited to the following items:
- Analysis of data would be extrapolated to determine nearby area/downwind odor impacts from biosolids spraying operations. Atmospheric odor modeling would be used as necessary to make these predictions.
  - Identify control measures that will provide acceptable odor, to include: limits on loading rates (liquid and solids loading), limits on type of biosolids applied, climate/wind restrictions, time of day restrictions, frequency of application, and other appropriate limits.
  - Analyze information to identify the fate of biosolids pollutants, such as nutrients (nutrients taken up by site vegetation, or percolate downward into the final landfill cover, or contained in site runoff, transformed in gaseous release to atmosphere, etc.), and similar fate for biosolids metals and also for residual pathogens within biosolids.

Supporting Explanation: Application of high-moisture-content biosolids obtained from the adjacent West County Wastewater District (WCWD) Wastewater Treatment Plant to closed

landfill sideslopes is a proposed activity within the proposed Biosolids/Dredged Material Spreading operation. The biosolids would be anaerobically digested at the WCWD plant with a moisture content typically ranging from 94 to 98 percent (2 to 6 percent solids). It is proposed that 24 million gallons (MG) of these biosolids would be spray-applied during the dry months of the year (April to October) to about 22.5 acres of the southern and eastern sideslopes of the landfill (Figure 3-3 and 3H-1 of the Draft EIR). In the past, the Applicant has accepted dried sludge from the WCWD plant's sludge drying lagoons (20 to 60 percent moisture) for use as Alternative Daily Cover and to enhance the landfill's final cover soils without odor impact. It is expected this activity would continue without creation of nuisance odor conditions, since operationally there have not been problems with past practice.

The Applicant conducted limited investigations in 2002 that included limited applications of liquid biosolids to landfill sideslope areas and a progress report was prepared. According to the Applicant, no offensive odors were noted in these pilot demonstrations. Prior to full-scale implementation of biosolids spreading, the Applicant proposes to conduct further testing to refine the rates and methods of application. Analyses included in Section D of Chapter 6 in the Draft EIR, however, indicate that the disposal of the large quantity of water included in 24 MG of sludge (about 22.5 to 23.5 MG) may not be feasible as proposed and that either more land area would be required, or the quantities of biosolids would need to be reduced (see Mitigation Measure 6-4, above).

The continued acceptance of dried lagoon sludge from the WCWD at the landfill would be operated to prevent nuisance odor conditions because that sludge, which has been anaerobically digested, has been stored in the lagoons for many months. This storage provides a large amount of stabilization of the sludge material where volatile solids and other odor-producing components of the sludge are further degraded. As a result, the odor nuisance of the dried product is substantially reduced because the dried sludge is much more stable. BAAQMD enforcement records over the last 5 years indicate the WCWD treatment plant has not received any violation notices, and one confirmed odor complaint. Thus, pursuant to the BAAQMD criteria, the treatment plant has not caused a significant odor impact.

Anaerobic digestion is an effective sludge treatment process that serves to destroy typically 40 to 52 percent of the volatile solids, stabilizes remaining sludge, destroys pathogens, and reduces odor and vector attraction potential.

However, even with 30 days or more of retention time in the digesters (the amount of time most sludge particles remain in the digesters for treatment) as commonly obtained at the WCWD plant, the spray application of this material at full-scale implementation on about 22.5 acres would have the potential to create nuisance odor conditions that would be experienced by surrounding land uses, including users of the proposed Public Access Trail (Trail). Mitigation Measure 10-7 contains requirements for additional evaluations and refinement of technical parameters, and the water pollution potential. Large-scale operation would be guided by these measures.

The requirements of this mitigation measure to provide for additional evaluations and refinement of technical parameters, with the performance standard of no off-site objectionable odors, would mitigate this potential impact to a level of insignificance.



Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Health and Safety**

**Impact 11-7**

The proposed spraying or spreading of liquid biosolids (greater than 90 percent moisture) to the landfill sideslopes as well as the spreading of drier biosolids (less than 90 percent moisture) could impact WCCSL employees and users of the Trail.

**Mitigation:**

- (a) WCCSL employees would have the necessary inoculations prior to their participation in the biosolids spreading program.
- (b) The Applicant would demonstrate to the RWQCB that lagoon storage of biosolids at the WCWD produces Class A biosolids pursuant to 40 CFR 503 regulations. This demonstration shall include, but is not limited to, the following:
  - A work plan would be prepared which defines the pathogen and related testing that will be completed on the biosolids. The work plan would be reviewed by the RWQCB and the EPA Region 9 Sludge Coordinator before beginning work.
  - Upon approval of the work plan, pathogen testing work would be completed on digested sludge and sludge withdrawn from the storage lagoon to determine if Class A pathogen densities have been achieved.
  - Lagoon operational parameters would be defined during this testing work that would then be used in the future to help define the conditions under which Class A material is produced – conditions such as length of time within lagoon storage, feeding limitations, etc.
- (c) Lacking such a demonstration in Mitigation Measure (b) above, the Applicant would demonstrate to the RWQCB that a combination of Trail closure, rotational dried biosolids spreading, and fencing can be used to provide the necessary site restrictions to conform to 40 CFR 503 regulations and provide the necessary public health protection. The

demonstration shall include, but is not limited to, the following:

- Identify set-back distances/ restrictions from the Trail and any other public-accessible area/locations.
- Define fencing, signing, and related features that will be adequate to prevent public access to areas of biosolids application under certain site conditions.
- Define other restrictions such as area closure during and after spreading/application, closure for certain periods of time or time of day, closure during rain, fog, or other situations.

(d) The Applicant would demonstrate to the RWQCB compliance with the vector attraction reduction requirements of 40 CFR 503 regulations. It is assumed Option 1 (Table 11-4) would be appropriate and involves demonstrating that the mass of volatile solids (VS) in the biosolids is reduced by a minimum of 38 percent during biosolids treatment. The minimum of 38 percent VS reduction in the treatment system can be demonstrated with either of the two following methods:

- Direct Calculations. The VS concentration in its influent and effluent biosolids samples will be monitored. Influent samples would be the 24-hour composite sample paced with the influent flow rates. Effluent samples could be daily grab samples. The mass of VS reduction can be calculated directly from the flow and VS concentration data.
- Sludge Production. The VS reduction is proportionate to the sludge production. From the biochemical oxygen demand and total suspended solids concentrations and flow rate in the influent and effluent samples, the sludge production rate can be calculated and the reduction of VS mass can be verified.

Supporting Explanation: The Applicant's control measures incorporated into the Project include the following:

- a) Biosolids would not be placed in any area where the public can have contact with the materials. During biosolids application, sensitive portions of the Trail would be closed

- for a 4- to 6-week period and areas fenced off to prevent public access until the materials are disked into the soil surface of the landfill cover.
- b) Signs would be posted at the edge of biosolids application areas indicating boundaries of the area and warning unauthorized persons of the restricted access.
  - c) Spray application of liquid biosolids of typically 2 to 6 percent solids would be conducted at the southwestern portion of the WCCSL site only under favorable wind conditions (e.g., less than 10 mph), when wind drift of bioaerosols to the Trail is not likely.
  - d) Spray application of biosolids would be conducted in a downwind direction and applications would be adjusted to account for wind speeds and directions. Spraying would be suspended if necessary (wind speeds in excess of 20 mph or wind blowing toward the Trail).
  - e) Employees would be required to use protective clothing and instructed in proper biosolids handling procedures.
  - f) Regular follow-up observations of working practices would be conducted by the Applicant and quarterly employee retraining would be required to assure public health safeguards are met.
  - g) An annual report would be prepared, under the review and oversight of the LEA, which summarizes the health protection procedures that were followed, any problems, and corrective measures that were or need to be taken.

Application of high-moisture-content biosolids obtained from the adjacent West County Wastewater District (WCWD) Wastewater Treatment Plant to closed landfill sideslopes is a proposed activity within the proposed Biosolids/Dredged Material Spreading operation. This is also discussed extensively under Impact 11-1, above. The discussion is incorporated by reference herein.

The Applicant's proposed biosolids/dredged material spreading includes spraying or spreading of high moisture content biosolids (greater than 90 percent moisture) obtained from the WCWD to the southern and eastern sideslopes of the Class II landfill. The biosolids are anaerobically digested wastewater (sewage) sludge. Drier biosolids (less than 90 percent moisture) from the WCWD lagoons could also be applied to all of the landfill final slope areas.

The biosolids are considered to be Class B under 40 CFR 503 regulations, which is not pathogen free. However, Class B biosolids do have adequate pathogen reduction requirements which, along with use of site restrictions to prevent human contact, would enable it to be used at certain sites.

The spray application of biosolids would produce bioaerosols. Potential receptors of the bioaerosols include WCCSL employees and customers, and users of the Trail. As can be seen from Figure 3-7 in the EIR, the alignment of portions of the Phase 1 and 2 Trail is near (about 500 feet) the proposed biosolids spray application area, near the southwestern corner of the Class II landfill. Additionally, the Phase 2 and 3 Trail segments would proceed through the western and northern landfill sideslope areas that will receive annual applications of biosolids,

which is a continuation of an existing authorized practice to improve soil tilth and provide nutrients for plant growth. While some of the technical details of the proposed biosolids spreading program still need to be evaluated further by the Applicant, the Applicant has acknowledged that public health protection is a prerequisite for this activity to be permitted and implemented.

The application of the Applicant's control measures, Mitigation Measure 11-7, and the requirement to meet prescriptive and performance standards for management and handling of the biosolids materials as directed by appropriate regulatory agencies, would mitigate this impact to a level of insignificance. The detailed discussion in the mitigation measure itself explains the technical requirements and basis for determining the impact would be mitigated.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

**Impact 11-11**

Green wastes can contain the plant pathogen *Phytophthora ramorum*, the causative agent of Sudden Oak Death. The Composting Facility and Wood Waste Recovery Facility could facilitate the spread of this pathogen.

**Mitigation:**

The Applicant shall comply with new revised Federal rule and revised California rule regarding composting and control of *Phytophthora ramorum*, expected some time in 2003. If finished compost or mulch is transported out of the quarantined area, a Compliance Agreement would be executed with the County Agricultural Commissioner at the required time.

Supporting Explanation: Sudden Oak Death is an oak-killing disease first discovered in California in 1995. In California, Sudden Oak Death has been reported from Sonoma Valley in the north to Big Sur in the south, a 190-mile range, as well as east to the Napa County border, about 25 miles inland. In October 2001, Alameda County became the tenth California county to be infested with the pathogen. Contra Costa County is one of 12 counties in the State that were quarantined by the Federal government on February 14, 2002, thus regulating the interstate movement of regulated or restricted articles. Quarantined counties include the following:

Humboldt	Solano
Mendocino	Alameda
Sonoma	Santa Clara
Napa	San Mateo
Marin	Santa Cruz
Contra Costa	Monterey

Research on Sudden Oak Death and the regulatory framework for composting facilities is ongoing. The CIWMB is helping to sponsor a research project at the University of California

at Berkeley to verify that composting is effective at destroying this pathogen. A new revised Federal interim rule and revised California rule will address composting and accepting potentially contaminated wood waste. Under the anticipated regulatory environment, requirements will differ for existing permit holders, such as the Applicant, depending on whether or not finished products are transported out of the quarantined area, as follows:

1. If materials such as compost or mulch stay within the quarantined area, no restrictions would apply.
2. If materials are transported out of the quarantined area, then the following would apply:
  - Finished compost could be beneficially used, but the Applicant would need to execute a Compliance Agreement with the respective County Agricultural Commissioner, as the agent of the California Department of Food and Agriculture, which would contain certain specified conditions.
  - Wood waste such as mulch which has not undergone the composting process could only go to a specific permitted facility. The Applicant, as well as the transporter, would be required to execute compliance agreements with the respective Agricultural Commissioner.

Implementation of the above requirements in Mitigation Measure 11-11 would reduce this impact to a level that is less than significant.

Having reviewed and considered the information contained in the FEIR, the Board finds that the Mitigation Measures described would reduce this potentially significant impact to a level of insignificance.

## **VII. Findings on Related Actions**

The project evaluated in the WCCSL Bulk Materials Processing Center and Related Actions EIR included two “Related Actions”: (1) a Class II Landfill Height Increase, and (2) a Public Access Trail.

A height increase in the Class II area of the landfill is proposed to correct for differential settlement and provide adequate drainage at the top of the landfill, as well as provide additional capacity. Evaluation of the height increase in the EIR is required before a Solid Waste Facilities Permit revision can be issued by the Local Enforcement Agency, but this height increase is not subject to the jurisdiction of Contra Costa County.

A Public Access Trail (Trail) surrounding the WCCSL has been envisioned for many years. While segments of the Trail have been considered in previous CEQA documents, most of the currently proposed Phase 1 alignment has not, and none of the total alignment has been addressed in the context of other proposed Project components. The Trail would be subject to the Control Measures and Mitigation Measures identified in the WCCSL Bulk Materials Processing Center and Related Actions EIR to address potential environmental impacts

associated with the Trail, which include Mitigation Measure 9-4, which eliminates a proposed Phase 4 of the trail in order to eliminate or avoid potentially significant impacts to wildlife and its habitat.

### **VIII. Findings Regarding Project Alternatives**

The EIR describes potential alternatives rejected during the scoping process. In response to comments on the Draft EIR and on the RTC, the EIR also describes why some alternatives suggested by commenters should not be evaluated further. The Board adopts and ratifies the EIR's conclusions on these potential alternatives, for the reasons stated in the EIR.

The EIR evaluated a reasonable range of alternatives to the original project that was described in the Draft EIR. These alternatives include the No Project Alternative, the Alternative WRC Location on the WCCSL Site Alternative, and the Alternative Composting Process Alternative. A Preferred Environmental Alternative was also identified. The analysis examined the feasibility of each alternative, the environmental impacts of each alternative, and the ability of each alternative to meet the Applicant's project objectives. The EIR also adequately discussed modifications and refinements of these alternatives.

The Board certifies that it has independently reviewed and considered the information on alternatives provided in the EIR and the record. The EIR reflects the Board's and the County's independent judgment as to alternatives. The Board finds that the Preferred Environmental Alternative (PEA), as discussed in Chapter 13 of the EIR, and which includes the Project proposed by the Applicant, the mitigation measures discussed in Chapters 4 through 12 and summarized in Table 2-1 of the Draft EIR, elimination of Phase 4 of the Trail, the Area A location and associated development plan for the proposed WRC, and the use of aerated static pile as the primary composting process provides the best balance between satisfaction of the Applicant's project objectives and mitigation of potential significant impacts to the extent feasible. Significant impacts associated with the proposed Project would be reduced to less-than-significant levels with the PEA, with the exception of PM<sub>10</sub> emissions. Although the PEA would have lower PM<sub>10</sub> emissions than the proposed Project (because of the reliance on the aerated static pile composting process in lieu of windrow composting), a significant unavoidable PM<sub>10</sub> impact would remain.

The No Project Alternative as proposed in the Draft EIR is rejected as infeasible. The no-Project alternative would not meet the Applicant's Project objectives that relate to restoring areas of the landfill central plateau, expanding recycling operations while further reducing reliance on landfill disposal, establishing a facility for self-haul and new business, and facilitating improved alignment of the Trail. In view of the substantial settlement that has occurred on the landfill plateau, limiting the Class II landfill to a maximum fill height of 130 feet msl would not provide a needed "buffer" to maintain acceptable slopes after anticipated future settlement. More effective drainage management would not be provided. Under the No Project alternative, the significant unavoidable adverse impact associated with particulate matter less than 10 microns in diameter (PM<sub>10</sub>) emissions discussed in Chapter 10 would not occur. Emission levels associated with existing permitted WCCSL and BMPC operations would continue.

With the No Project alternative, a large increase in resource recovery processing capacity would not occur (also considered “unrealized”) at the WCCSL. Table 13-1 of the Draft EIR summarizes the unrealized resource recovery processing capacity under the No Project alternative. The table shows the proposed increase in permit limits for the BMPC, their corresponding estimated diversion efficiencies, and the unrealized resource recovery processing capacity in tons per year. Approximately 957,150 tons per year of waste materials are proposed to be processed through the Project. This material would have to be processed at other existing or proposed facilities. A portion of the materials would have to be processed at the Central IRRF, which is permitted for 438,000 tons per year (TPY) (1,200 TPD) and currently receives about 55,000 TPY. The municipal solid waste proposed for the WRC (365,000 TPY) would be handled at the Central IRRF within this permitted capacity under the No Project alternative. Currently, the Authority’s Self-Haul Agreement with Richmond Sanitary Services prohibits acceptance of self-haul waste at the Central IRRF. The remaining waste material of about 519,150 TPY would need to be processed/disposed of at other facilities, resulting in a possible loss of new diversion for some jurisdictions.

## **IX. Findings Regarding Growth Inducement**

The Board finds that the Project would have no growth-inducing impacts because, as explained in the EIR on pages 14-3 and 14-4, The proposed Project is mostly activity related and does not involve construction of major new facilities that would stimulate the Bay Area’s economy. The proposed Waste Recycling Center (WRC) and relocated equipment maintenance building would be the main new facilities. Construction of these facilities would occur over a relatively short period of approximately 18 months. The number of new construction jobs would be negligible compared to the City’s and County’s total employment. The demand for skilled labor would likely be met from the existing labor pool. Expanded resource recovery and recycling operations would be expected to create new jobs. In addition, adding recyclables to various markets (instead of disposal in landfills) would have a positive, but unquantifiable economic impact.

The BMPC changes provide for substantially increased resource recovery operations at the West Contra Costa Sanitary Landfill. The related actions include a vertical height increase at the Class II landfill for improved drainage management, and the Trail. The landfill height increase from 130 feet above mean sea level (msl) to 160 feet msl, assuming the WRC is constructed at the former Soil Remediation Building location, would also provide approximately 17 months of additional disposal capacity with landfill closure in about April 2005.

Provisions of additional resource recovery and disposal capacity could be viewed as growth inducing, since a possible constraint for future growth would be removed for a limited duration. However, such activities are not now a constraint to growth, nor are they expected to become so in the future. In the General Plan Growth Management Elements of both the City of Richmond and County of Contra Costa, the following public services are identified as controlling factors for growth for which performance standards have been established: traffic

circulation, water, sanitary sewer, fire protection, public protection, parks and recreation, and flood control and drainage. Other public services, such as related to solid waste, are addressed by General Plan policies rather than performance standards. The proposed Project, as detailed in the EIR, is consistent with both the City and County General Plans. Increased resource recovery, recycling, and provision of a local facility for the public to drop off waste is encouraged in the General Plans and required by the California Integrated Waste Management Act (also known as AB 939).

## **X. Statement of Overriding Considerations**

As noted in Impact 10-2, emission increases from on-site sources would exceed the BAAQMD significance thresholds for PM<sub>10</sub>. On-site emissions consist of process emissions (from stationary equipment and facilities), mobile equipment, vehicles operating on and off the site, and fugitive dust generated by the action of vehicles and equipment on unpaved surfaces.

The Draft EIR provides a detailed discussion of control measures proposed by the Applicant in addition to Mitigation Measure 10-2 (see page 10-18 through 10-21 of the Draft EIR). A wide range of control measures have been proposed by the Applicant for all aspects of BMPC operations. Control measures and Mitigation Measure 10-2 are designed to control on-site emissions. Despite these measures, this impact cannot be feasibly mitigated to a level that is less than significant. Estimates for existing, 2008, and 2015 emissions of PM<sub>10</sub> substantially exceed the BAAQMD's standard threshold of significance of 80 pounds per day.

In the Draft EIR, Tables 10-4 through 10-6 showed the estimated existing and future Project-generated emissions for 2008 and 2015 from on-site and off-site activities. In the Final EIR Responses to Comments document, Tables 10-4, 10-5 and 10-6 were revised to reflect updated emissions estimates. While the numerical value of impact shown in Tables 10-4 through 10-6 has increased slightly, conclusions regarding the significance of impacts are unchanged.

Emissions of ozone precursors (ROG and NOx) would decline from existing levels primarily due to a gradual decline in the LFG generation and current and future State-mandated emissions standards for heavy duty off-site road vehicles and equipment. Existing on-site PM<sub>10</sub> emissions were calculated to be about 413 pounds per day. The proposed Project would result in an increase in on-site emissions of PM<sub>10</sub>, primarily due to the proposed increase in throughput (materials processed) for the asphalt and concrete recycling operations and composting.

Calculated PM<sub>10</sub> emissions in the Final EIR are shown to increase from the existing 413 pounds per day to 1,479 pounds per day in 2008. The estimated emission for 2015 remained unchanged at 2,206 pounds per day. The net increase of PM<sub>10</sub> for both on and off site of 1,084 pounds per day in 2008 and 1,809 pounds per day in 2015 (see revised Tables 10-5 and 10-6 in Final EIR) would exceed the BAAQMD's threshold of significance of 80 pounds per day.

Despite the Applicant's control measures and the imposition of all available mitigation measures, at the time of these Findings, no feasible mitigation measure exists to fully mitigate



this impact to a less than significant level. In light of the overriding considerations set forth below, the Board finds and determines that each of the following benefits of the Project outweighs the remaining significant, adverse impact of the Project. These considerations warrant the approval of the Project and each of its component parts, notwithstanding the remaining significant impact. Each of the overriding considerations set forth below constitutes a separate and independent ground for finding that the benefits of the Project outweigh the significant, adverse environmental impacts and is an overriding consideration warranting approval.

- The Project provides infrastructure to reduce the amount of solid waste being disposed of in our landfills. The Project, which involves substantial waste diversion (resource recovery), serves to implement solid waste management policies and goals, required for meeting or exceeding the State mandate that local governments divert 50% of solid waste from disposal in landfills pursuant to the Integrated Waste Management Act of 1989, as amended.
- The Project would permanently preserve the vast majority of the Project site as open space that might otherwise be designated primarily for industrial or commercial use, thereby preserving the natural beauty of the open space as well as its habitat value for plants and wildlife.
- The Project, through payment of a Mitigation Fee, would help implement provisions designed to minimize illegal dumping and improve the livability and quality of life in the North Richmond community.
- The Project would remedy existing deficiencies related to public access to the San Pablo Bay shoreline. It enhances a network of regional trails in the area. It protects the biological and aesthetic resources of Wildcat and San Pablo Creeks, portions of the bay shoreline, and tidal flats located in Area C by precluding interference from solid waste and recreation uses and by establishing exclusionary buffer zones.